

Amendments to the Specification:

Insert the paper copy of the Sequence Listing filed herewith following the Oath/Declaration.

Please add the following new paragraph after the title ("REGULATION OF CELL GROWTH BY MUC1") on page 1, line 1:

--This application claims priority of U.S. Application Serial Number 10/032,786, filed December 26, 2003, which claims priority of U.S. Provisional Application No. 60/257,590, filed December 22, 2000, and U.S. Provisional Application No. 60/308,307, filed July 27, 2001. The disclosures of U.S. Application Serial No. 10/032,786, U.S. Provisional Application No. 60/257,590, and U.S. Provisional Application No. 60/308,307 are incorporated herein by reference in their entirety. --

Please replace the paragraph beginning at page 14, line 7, with the following amended paragraph:

Fig. 12D is a depiction of the amino acid sequence of MUC1/CD (SEQ ID NO:1). Tyrosine residues (Y) at positions 8, 20, 26, 35, and 46 are shown in bold and are underlined. The GSK3 β -binding and phosphorylation site (STDRS; SEQ ID NO:9), the c-Src-binding sequence (YEKV; SEQ ID NO:11), and the β -catenin-binding sequence (SAGNGGSSLS; SEQ ID NO:10) are indicated.

Please replace the paragraph beginning at page 17, line 27, with the following amended paragraph:

The inventors have found that the tyrosine kinase c-Src binds via its SH3 domain to, and phosphorylates, the cytoplasmic domain (CD) of the human mucin molecule MUC1. In addition to other sites, c-Src phosphorylates a tyrosine residue in the a YEKV (SEQ ID NO:11) site in the

CD of MUC1 (MUC1/CD), i.e., position 46 of SEQ ID NO:1. The SH2 domain of c-Src was found to bind to phosphorylated but not to unphosphorylated MUC1/CD. On the other hand, c-Src-mediated phosphorylation of MUC1/CD leads to decreased ability of MUC1/CD and glycogen synthase kinase 3 β (GSK3 β) to physically associate with each other. This observation was made both in cells and in a cell-free system.

Please replace the paragraph beginning at page 42, line 24, with the following amended paragraph:

To identify the site in MUC1/CD that binds to p120, full-length MUC1/CD and the N- and C-terminal fragments (Fig. 7A) were incubated with purified GST-p120. Precipitation with glutathione beads and analysis of the precipitates by immunoblotting with anti-MUC1/CD demonstrated binding of p120 to full-length MUC1/CD and both fragments (Fig. 7B). These results suggested that p120 binds to a site in the region common to the N- and C-terminal fragments. To further localize the site, two peptides from the overlapping region were prepared. Incubation of the peptides with MUC1/CD and GST-p120 demonstrated that MSEYPTYHHTH (SEQ ID NO:7), but not GRYVPPSSTDR (SEQ ID NO:8), inhibits the formation of MUC1-p120 complexes (Fig. 7C). These findings indicate that p120 interacts with the MSEYPTYHHTH site (SEQ ID NO:7) in MUC1.